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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,298	01/04/2002	John A. R. Spooner	A1036A	1250

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EXAMINER

SANGHAVI, HEMANG

ART UNIT	PAPER NUMBER
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2874

DATE MAILED: 10/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/038,298

Applicant(s)

SPOONER, JOHN A. R.

Examiner

Hemang Sanghavi

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-39 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) 20-39 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3. 6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 20-39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 20, 28, and 35, the use of term "generally" renders the claims indefinite, since the term "generally" renders the scope of the claims unascertainable.

Claims 21-27, 29-34, and 36-39 are necessarily rejected, since these claims directly or indirectly depend upon the rejected base claims and include the same deficiency.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 20-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Delage et al (US 5,602,953) and Heywood (US 4,707,074).

Delage et al discloses a composite communication cable comprising an optical sub-unit, the optical sub-unit including a tube surrounding a plurality of optical fibers; an

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electrical sub-unit; and the optical and electrical sub-units being removably connected at a medial portion (17) between the sub-units by a common jacket material.

Delage et al fails to disclose strength members or filaments in the optical subunit for partially decoupling the optical fiber from the tube.

Heywood, in a related art, discloses an optical fiber cable including a tube surrounding plurality of optical fibers and filaments (9) are provided on wall of the tube for decoupling the optical fibers from the tube. Such filaments (rip cords) facilitate the removal of the fiber without the need to cut into the outer wall with a knife or like tool.

From collective teachings of Heywood, the ordinary artisan would have found it to be obvious at the time of the invention to provide filaments (rip cords) in the tube of the optical sub unit in Delage et al, as taught by Heywood, for the purpose of providing easy access to the fibers without any cutting tools.

As to fiber being tight buffer, it is well known in the art to use tight-buffered fibers or loose tube fibers depending upon application of the cable.

From readily commercially available fibers, the ordinary artisan would have found it obvious matter of design choice to choose tight-buffered fiber in the cable of Delage et al for the purpose of providing desirable application cable.

Delage et al fails to disclose the optical fiber with at least one periodic refractive index therein or use of multicore optical fibers.

The optical fibers with the periodic refractive index (grating) are commercially available and well known in the art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use gratings in the optical fiber of Delage et al because such gratings are commonly used in the art to reduce dispersion by reflecting unwanted light signals with unwanted wavelengths.

As to the identification means, it is certainly well known in the art to provide identification means such as color coding, color coating, bar coding, and magnetic stripes on the optical fibers cables and/or strands.

It would have been obvious to one of ordinary skill in the art at the time of the invention to place identification means on the cable of Delage et al because it would allow easier identification of the strands when termination the cable.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tansey et al discloses an optical fiber cable with a ripcord. Keller, Starnes et al, and Sawai disclose different types of cables including optical fibers and electrical conductors.

The prior art submitted by applicant has been considered. See attached copy of form PTO-1449.

Since the Delage et al reference used in the above rejection was submitted by applicant in the prior art statement, no copy thereof is provided with this Office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hemang Sanghavi whose telephone number is 703-

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305-3484. The examiner can normally be reached on Monday-Thursday (8:30 AM-6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on 703-308-4819. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.



Hemang Sanghavi
Primary Examiner
Art Unit 2874

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